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ATM network for an IP telephony session between the calling party and the called party, whereby the first device and the second device are assigned on a per session basis.

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24. (Amended) The system as claimed in claim 20, wherein said intelligent control layer comprises:

means for assigning a temporary IP session proxy address for said called party at said first device; and

means for assigning a temporary IP session proxy address for said calling party at said second device.

REMARKS

In view of the following remarks, favorable reconsideration of the outstanding office action is respectfully requested. Claims 1-24 remain in this application. Claims 1, 5, 12, 20, and 24 have been amended.

§ 102 Rejections

The Examiner has rejected claims 1-24 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,889,777 (the Miyao patent). The rejection is respectfully traversed. The applicant believes the rejection is improper because the examiner failed to make a prima facie case of anticipation. Nevertheless, the applicant has amended independent claims 1, 5, 12, 20, and 24 to more clearly define the present invention.

Claim 1 of the present invention is directed to a method of providing quality of service in an Internet Protocol (IP) telephony session between a calling party and a called party. The method includes transporting IP telephony media for the telephony session between the calling party and a first device. The first device has IP telephony capability and ATM capability. IP telephony media for the telephony session is transported between the called party and a second device. The second device also has IP telephony capability and ATM capability. An ATM virtual circuit is established for the session between the first device and the second device. The data path for the telephony session is secured by the use of proxy addressing.

Claim 5 of the present invention is directed to a method of providing quality of service in an IP telephony session between a calling party and a called party. The

method includes assigning a temporary IP proxy address to the called party at a first access control manager. A temporary IP proxy address is assigned to the calling party at a second access control manager. A switched virtual circuit is established for the session between the first access control manager and the second access control manager.

Claim 12 of the present invention is directed to a method of providing quality of service in an IP telephony session between a calling party and a called party. The method includes assigning a temporary IP proxy address to the called party at a first access control manager. A temporary IP proxy address is assigned to the calling party at a second access control manager. A temporary second network calling party address is assigned for said session at said first access control manager. A temporary second network calling party address is assigned for said session at said second access control manager.

Claim 20 of the present invention is directed to a system for providing a quality of service IP telephony session between a calling party and a called party. The system includes an IP telephony network. The IP telephony network provides IP telephony access to the calling party and to the called party. An ATM network is also provided. A first device is connected between said IP telephony network and said ATM network. The first device provides bi-directional translation between IP media traffic and ATM traffic. A second device is connected between said IP telephony network and said ATM network. The first device provides bi-directional translation between IP media traffic and ATM traffic. An intelligent control layer establishes a virtual circuit through said ATM network for an IP telephony session between the calling party and the called party, whereby the first device and the second device are assigned on a per session basis.

Miyao is directed to a network server that includes, among other things, LAN terminating units, a data transfer unit and an ATM terminating unit. The LAN terminating units are connected to LAN terminals. The ATM terminating unit is connected to an ATM network. The interconnection of the network server, LAN terminals, and ATM network forms a virtual LAN. The data transfer unit receives data from a LAN terminating unit. The received data includes a destination MAC address. The destination MAC address corresponds to an ATM termination unit and

a LAN termination unit. The data transfer unit transfers data to the units corresponding to the destination addresses. While the virtual LAN supports packetized data transfer, the virtual LAN does not support IP telephony.

According to MPEP 2131, "to anticipate a claim, the reference must teach every element of the claim." A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Regarding Claim 1:

The network server disclosed by Miyao is used to provide quality of service in a virtual LAN. The virtual LAN disclosed by Miyao is used to transfer data between terminals coupled to the virtual LAN, whereas the present invention is directed to a method of providing quality of service in an Internet Protocol (IP) telephony session. There is a world of difference between the two. Establishing an IP telephony session is much more difficult than routing data in a LAN, for several reasons. First of all, a telephony session is a full duplex voice session between two parties. In other words, voice data is being transmitted in both directions simultaneously, such that the parties can carry on a conversation. If ordinary data packets are delayed en route, they can be reassembled in the proper order, with no adverse consequences, once all the data packets have arrived. This is not true of a full duplex voice session. If packets are lost or overly delayed, the parties experience intolerable distortion and service degradation. This is an aspect of the present invention that the Examiner has not heretofore appreciated. The present invention provides full duplex packet voice transmission (e.g., an IP telephony session) over an ATM network. Miyao does not.

Miyao also does not disclose transporting IP telephony media between the calling party and the first device. Miyao simply discloses transporting data packets between terminals in the virtual LAN. While Miyao discloses a network server that can repackage a data packet within an ATM cell, Miyao does not disclose a device that has both IP telephony capability and ATM capability. The first step of claim 1 is therefore not disclosed in Miyao.

In similar fashion and for the same reasons, the second step of claim 1 is not

disclosed in Miyao. Miyao does not disclose transporting IP telephony media for the IP telephony session between the called party and the second device. Miyao also does not disclose a second device that has both IP telephony capability and ATM capability. Thus the second step of claim 1 is also not taught by Miyao.

In addition to not teaching the first and second steps of claim 1, Miyao does not teach the third step, that is, establishing an ATM virtual circuit for the IP telephony session. This is because, as explained above, Miyao does not disclose establishing an IP telephony session. Once again, those of ordinary skill in the art will recognize that an ATM virtual circuit for an IP telephony session is a full duplex voice session between two parties spanning the first device, the ATM network, and the second device. The network server disclosed by Miyao cannot be the first or second device as claimed, because the server is an element of the ATM based LAN. Thus, Miyao does not disclose, teach, or suggest this step either.

The third step also includes the limitation that a data path for the telephony session is secured by the use of proxy addressing. The Examiner asserts that Figure 4 of Miyao shows first and second access managers assigning IP addresses to a called party and a calling party. The applicants vehemently disagree. Figure 4 is discussed in column 9, lines 19-60 of Miyao. This passage describes the process whereby a destination MAC address and a destination sub-network address are obtained from the received data. In Figure 4, the MAC address is checked to see if it is reliable. This has nothing whatsoever to do with IP proxy addressing as recited in the claim and disclosed in Figure 2 and the associated text of the specification of the present invention.

Therefore, it is respectfully suggested that the rejection of claim 1 for anticipation is overcome. Dependent claims 2-4, being dependent upon and further limiting independent claim 1, should also be allowable for that reason, as well as for the additional recitations they contain. For example, claim 4 recites the steps of assigning a calling party number at the first device, and assigning a called party number at the second device. Miyao does not teach, suggest, or disclose these limitations either.

Regarding Claim 5

The network server disclosed by Miyao is used to provide quality of service

to a virtual LAN. The present invention is directed to a method of providing quality of service in an Internet Protocol (IP) telephony session. The entire discussion with respect to the IP telephony session of claim 1 not being disclosed in Miyao is equally relevant to claim 5. Miyao et al. simply does not disclose the element of establishing a circuit for an IP telephony session as recited in claim 5, nor does it disclose the concept of a calling party and a called party as those terms are known to one skilled in the art, based on both the field of art and the specification.

The first two steps of claim 5 require the assignment of IP proxy addresses. In the first step, a temporary IP proxy address is assigned to the calling party. In step 2, a temporary IP proxy address is assigned to the called party. As discussed above in relation to claim 1, Miyao does not teach, suggest, or disclose IP proxy addressing.

As explained above in relation to claim 1, Miyao does not teach the third step, that is, establishing an ATM virtual circuit for the IP telephony session.

Therefore, it is respectfully suggested that the rejection of claim 5 for anticipation is overcome. Dependent claims 6-11, being dependent upon and further limiting independent claim 5, should also be allowable for that reason, as well as for the additional recitations they contain. For example, claim 6 recites the steps of assigning a calling party number at the first device, and assigning a called party number at the second device. Miyao does not teach, suggest, or disclose these limitations either.

Regarding Claim 12

The Examiner does not engage in any analysis of claim 12 other than to state that their limitations closely parallel the limitations addressed in connection with the earlier claims 1-11. While the first two limitations of claim 12 closely parallel the first two limitations of claim 5, the last two steps of claim 12 have not been addressed by the examiner. Since the above described limitations found in claim 5 are lacking in Miyao, claim 12 is allowable for the same reasons. Specifically, claim 12 calls for providing an IP telephony session by assigning a temporary IP proxy address to the calling party at the second access control manager and assigning a temporary IP proxy address to the called party at the first access control manager.

Miyao does not teach, suggest, or disclose this feature either.

Claim 12 also recites the steps of assigning a temporary second network calling party address for said session at said first access control manager, and assigning a temporary second network calling party address for said session at said second access control manager. It is the Examiner's duty to point out where in the reference all the claim limitations can be found. A careful reading of Miyao reveals that Miyao does not teach, disclose, or suggest any of these steps.

Therefore, it is respectfully suggested that the rejection of claim 12 for anticipation is overcome. Dependent claims 13-19, being dependent upon and further limiting independent claim 12, should also be allowable for that reason, as well as for the additional recitations they contain. For example, claim 13 recites the steps of assigning a calling party number at the first device, and assigning a called party number at the second device. Miyao does not teach, suggest, or disclose these limitations either.

Regarding Claim 20

The Examiner also does not engage in any independent analysis of claim 20. Again, he states that their limitations closely parallel the limitations addressed in connection with the earlier claims 1-11. Claims 1-19 are method claims. Claims 20 – 24 are system claims. Again, before rejecting a claim under 35 U.S.C. §102(e), the Examiner must identify where in the reference all the claimed elements can be found. He has not done so.

In particular, the Examiner has failed to point out where Miyao teaches, discloses, or suggests a system that supports the establishment of an IP telephony session between a calling party and a called party, as recited in claim 20 and described in the specification. This shortcoming of Miyao was described in great detail above.

The Examiner has failed to point out where Miyao teaches, discloses, or suggests a system having both an IP telephony network and an ATM network. The Examiner points to Figure 9 of Miyao, but this Figure depicts a virtual local area network (LAN), not the combination of an IP telephony network and an ATM.

The Examiner has failed to point out where Miyao teaches, discloses, or

suggests a system having a first device and a second device coupled between the IP telephony network and the ATM. The Examiner relies on the network server disclosed by Miyao, but the Miyao's network server does not support IP telephony. Thus, the Examiner's reliance on Miyao is misplaced.

Finally, claim 20 recites an intelligent control layer establishes a virtual circuit through said ATM network for an IP telephony session between the calling party and the called party, whereby the first device and the second device are assigned on a per session basis. Again, the Examiner does not point out where this element can be found in Miyao. A careful reading of Miyao reveals that this element is not taught, suggested, or disclosed by Miyao.

Dependent claims 21-24, being dependent upon and further limiting independent claim 20, should also be allowable for that reason, as well as for the additional recitations they contain. For example, claim 24 recites means for assigning a temporary IP session proxy address for the called party at the first device, and means for assigning a temporary IP session proxy address for the calling party at the second device. The Examiner does not point out where these limitations can be found in Miyao. A careful reading of Miyao reveals that these limitations are not taught, suggested, or disclosed by Miyao.

Applicants respectfully request reconsideration of the rejection of claims 1-24 under 35 U.S.C. § 102(e) in view of the above remarks.

Conclusion

Based upon the above remarks and papers of record, Applicants believe the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicants respectfully request reconsideration of the pending claims 1-24 and a prompt Notice of Allowance thereon.

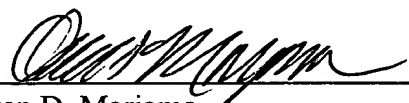
Applicants believe that no extension of time is necessary to make this Response timely. Should Applicants be in error, Applicants respectfully request that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Response timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 50-0289.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

Please direct any questions or comments to Daniel P. Malley at (607) 256-7307.

Respectfully submitted,

WALL MARJAMA & BILINSKI LLP

By: 
Owen D. Marjama
Reg. No. 22,818

ODM/DPM/cmh
Telephone: (315) 425-9000

Customer No.:



20874

PATENT TRADEMARK OFFICE



"VERSION WITH MARKINGS TO SHOW CHANGES MADE."

In the Claims:

1. (Amended) A method of providing quality of service in an Internet Protocol (IP) telephony session between a calling party and a called party, which comprises the steps of:

transporting IP telephony media for said session between said calling party and a first device having IP telephony capability and ATM capability;

transporting IP telephony media for said session between said called party and a second device having IP telephony capability and ATM capability; and

establishing an ATM virtual circuit for said session between said first device and said second device, whereby a data path for the telephony session is secured by the use of proxy addressing.

5. (Amended) A method of providing quality of service in an IP telephony session between a calling party and a called party, which comprises the steps of:

assigning a temporary IP proxy address [for]to the called party [for the session] at a first access control manager.

assigning a temporary IP proxy address [for]to the calling party [for the session] at a second access control manager.

establishing a switched virtual circuit for the session between the first access control manager and the second access control manager.

12. (Amended) A method of providing quality of service in an IP telephony session between a calling party and a called party, which comprises the steps of:

assigning a temporary IP proxy address [for]to the called party [for the session] at a first access control manager;

assigning a temporary IP proxy address [for]to the calling party [for the session] at a second access control manager;

assigning a temporary second network calling party address for said session at said first access control manager; and

assigning a temporary second network calling party address for said session at said second access control manager.

20. (Amended) A system for providing a quality of service IP telephony session between a calling party and a called party, which comprises:

an IP telephony network, said IP telephony network providing IP telephony access to the calling party and to the called party;

an ATM network;

a first device connected between said IP telephony network and said ATM network, said first device providing bi-directional translation between IP media traffic and ATM traffic;

a second device connected between said IP telephony network and said ATM network, said first device providing bi-directional translation between IP media traffic and ATM traffic; and

an intelligent control layer for establishing a virtual circuit through said ATM network for an IP telephony session between the calling party and the called party, whereby the first device and the second device are assigned on a per session basis.

24. (Amended) The system as claimed in claim 20, wherein said intelligent control [means]layer comprises:

means for assigning a temporary IP session proxy address for said called party at said first device; and

means for assigning a temporary IP session proxy address for said calling party at said second device.